

From the INTERNATIONAL BUREAU

PCT

FIRST NOTICE INFORMING THE APPLICANT OF
THE COMMUNICATION OF THE INTERNATIONAL
APPLICATION (TO DESIGNATED OFFICES WHICH
DO NOT APPLY THE 30 MONTH TIME LIMIT
UNDER ARTICLE 22(1))

(PCT Rule 47.1(c))

To:

JEPSEN, René, Pihl
Eltima Consulting
Shaftsbury Centre
Percy Street, Rodbourne
Swindon SN2 2AZ
ROYAUME-UNI

RECEIVED
Motorola

JUL 08 2005

Schaumburg Docketing

Date of mailing (day/month/year)
23 June 2005 (23.06.2005)

Applicant's or agent's file reference
CE11457EP *Stoiber*

IMPORTANT NOTICE

International application No.
PCT/EP2004/052013

International filing date (day/month/year)
02 September 2004 (02.09.2004)

Priority date (day/month/year)
21 November 2003 (21.11.2003)

Applicant

MOTOROLA INC et al

1. **ATTENTION:** For any designated Office(s), for which the time limit under Article 22(1), as in force from 1 April 2002 (30 months from the priority date), **does apply**, please see Form PCT/IB/308(Second and Supplementary Notice) (to be issued promptly after the expiration of 28 months from the priority date).

2. Notice is hereby given that the following designated Office(s), for which the time limit under Article 22(1), as in force from 1 April 2002, **does not apply**, has/have requested that the communication of the international application, as provided for in Article 20, be effected under Rule 93bis.1. The International Bureau has effected that communication on the date indicated below:
16 June 2005 (16.06.2005)

CH

In accordance with Rule 47.1(c-bis)(i), those Offices will accept the present notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

3. The following designated Offices, for which the time limit under Article 22(1), as in force from 1 April 2002, **does not apply**, have not requested, as at the time of mailing of the present notice, that the communication of the international application be effected under Rule 93bis.1:

LU, SE, TZ, UG, ZM

In accordance with Rule 47.1(c-bis)(ii), those Offices accept the present notice as conclusive evidence that the Contracting State for which that Office acts as a designated Office does not require the furnishing, under Article 22, by the applicant of a copy of the international application.

4. TIME LIMITS for entry into the national phase

For the designated Office(s) listed above, and unless a demand for international preliminary examination has been filed before the expiration of **19 months** from the priority date (see Article 39(1)), the applicable time limit for entering the national phase will, **subject to what is said in the following paragraph**, be **20 MONTHS** from the priority date.

In practice, **time limits other than the 20-month time limit** will continue to apply, for various periods of time, in respect of certain of the designated Offices listed above. For **regular updates on the applicable time limits** (20 or 21 months, or other time limit), Office by Office, refer to the *PCT Gazette*, the *PCT Newsletter* and the *PCT Applicant's Guide*, Volume II, National Chapters, all available from WIPO's Internet site, at <http://www.wipo.int/pct/en/index.html>.

It is the applicant's **sole responsibility** to monitor all these time limits.

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Authorized officer

Ellen Moyse

Facsimile No.+41 22 740 14 35

Facsimile No.+41 22 338 89 75

From the INTERNATIONAL BUREAU

PCTNOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
APPLICATION AS PUBLISHED OR REPUBLISHED

To:

JEPSEN, René, Pihl
Eltima Consulting
Shaftsbury Centre
Percy Street, Rodbourne
Swindon SN2 2AZ
ROYAUME-UNIDate of mailing (day/month/year)
16 June 2005 (16.06.2005)Applicant's or agent's file reference
CE11457EP

Stoiber

IMPORTANT NOTICE

International application No.
PCT/EP2004/052013International filing date (day/month/year)
02 September 2004 (02.09.2004)Priority date (day/month/year)
21 November 2003 (21.11.2003)

Applicant

MOTOROLA INC et al

The International Bureau transmits herewith the following documents:

copy of the international application as published by the International Bureau on 16 June 2005 (16.06.2005) under
No. WO 2005/055503copy of international application as republished by the International Bureau on under
No. WOFor an explanation as to the reason for this republication of the international application, reference is made to INID codes (15), (48)
or (88) (as the case may be) on the front page of the attached document.The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Authorized officer

Ellen Moyse

Facsimile No.+41 22 740 14 35

Facsimile No.+41 22 338 89 75

From the INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

ELTIMA CONSULTING
Shaftesbury Centre
Attn. Rene Pihl Jepsen
Percy Street
Swindon SN2 2AZ
UNITED KINGDOM

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL SEARCH REPORT AND
THE WRITTEN OPINION OF THE INTERNATIONAL
SEARCHING AUTHORITY, OR THE DECLARATION

(PCT Rule 44.1)

	Date of mailing (day/month/year) 18/01/2005
Applicant's or agent's file reference CE11457EP	FOR FURTHER ACTION See paragraphs 1 and 4 below
International application No. PCT/EP2004/052013	International filing date (day/month/year) 02/09/2004
Applicant MOTOROLA INC	

1. ☒ The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.

Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):

When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.

Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes
1211 Geneva 20, Switzerland, Fascimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.
3. ☐ **With regard to the protest** against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:
- ☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
- ☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. Reminders


Shortly after the expiration of **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. These comments would also be made available to the public but not before the expiration of 30 months from the priority date.

Within **19 months** from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until **30 months** from the priority date (in some Offices even later); otherwise, the applicant must, **within 20 months** from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the International Searching Authority  European Patent Office, P.B. 5818 Patentaan 2 NL-2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Marlene Benigar <div style="text-align: right;"> DOCKETED EIPD 19 JAN 2005 <i>Amendment</i> 18/mar05 </div>
---	--

NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

What documents must/may accompany the amendments?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

1. [Where originally there were 48 claims and after amendment of some claims there are 51]:
"Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
2. [Where originally there were 15 claims and after amendment of all claims there are 11]:
"Claims 1 to 15 replaced by amended claims 1 to 11."
3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
"Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or
"Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
4. [Where various kinds of amendments are made]:
"Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international application is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference CE11457EP	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/EP2004/052013	International filing date (day/month/year) 02/09/2004	(Earliest) Priority Date (day/month/year) 21/11/2003
Applicant MOTOROLA INC		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

METHOD FOR SELECTING A CHANNEL CODING SCHEME FOR USE IN INITIATING COMMUNICATIONS BASED ON CHANNEL CODING SCHEMES USED FOR COMMUNICATIONS IN THE CELL, AND CORRESPONDING INSTRUCTIONS STORED ON A STORAGE MEDIUM AND APPARATUS

5. With regard to the **abstract**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regards to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. 2

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☐ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/EP2004/052013

Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

The present invention relates to the selection of a channel coding scheme for communications in a wireless communication system. In the described arrangement, a cell-based channel coding scheme selected (S4) from a plurality of available channel coding schemes based on the channel coding schemes used in the cell. The stored selected channel coding scheme can then be used on initiation of a communication with a subscriber device (S8).

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/052013A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04L1/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04L H04Q G10L H03M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2003/198312 A1 (DAS ARNAB ET AL) 23 October 2003 (2003-10-23) paragraph '0004! - paragraph '0012! paragraphs '0024!, '0025!, '0030! paragraph '0045! - paragraph '0049! paragraphs '0051!, '0056!, '0057! paragraph '0084! - paragraph '0099! paragraphs '0111!, '0112!, '0116! paragraph '0123! figure 4	1-18
A	US 2002/154611 A1 (KHULLAR ANDERS) 24 October 2002 (2002-10-24) paragraph '0006! - paragraph '0011! paragraphs '0014!, '0015! paragraph '0027! - paragraph '0040! ----- -/--	1-18

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- * & * document member of the same patent family

Date of the actual completion of the international search

10 January 2005

Date of mailing of the international search report

18/01/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Bösch, M

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/052013

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>US 5 701 294 A (WARD TORBJORN ET AL) 23 December 1997 (1997-12-23) column 5, line 46 - column 6, line 10 column 7, line 24 - column 9, line 15 figures 6,7A,7B abstract</p> <p style="text-align: center;">-----</p>	1-18
A	<p>US 6 539 205 B1 (KOMAILI JALEH ET AL) 25 March 2003 (2003-03-25) column 1, line 31 - line 40 column 2, line 18 - line 56 column 8, line 12 - column 9, line 19 column 12, line 29 - line 35 figure 3</p> <p style="text-align: center;">-----</p>	1-18
A	<p>EP 1 255 368 A (SIEMENS INF & COMM NETWORKS) 6 November 2002 (2002-11-06) paragraph '0013! paragraph '0022! - paragraph '0027! paragraphs '0033!, '0034!, '0052! paragraphs '0074!, '0077! figure 16 abstract</p> <p style="text-align: center;">-----</p>	1-18

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/052013

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2003198312 A1	23-10-2003	NONE	
US 2002154611 A1	24-10-2002	WO 02069520 A1 EP 1364472 A1	06-09-2002 26-11-2003
US 5701294 A	23-12-1997	AU 7150696 A CN 1203009 A ,B EP 0853863 A1 WO 9713388 A1	28-04-1997 23-12-1998 22-07-1998 10-04-1997
US 6539205 B1	25-03-2003	TW 454394 B WO 9949610 A1	11-09-2001 30-09-1999
EP 1255368 A	06-11-2002	EP 1255368 A1 BR 0209278 A WO 02091655 A1 EP 1384344 A1 US 2004081248 A1	06-11-2002 13-07-2004 14-11-2002 28-01-2004 29-04-2004

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/EP2004/052013

International filing date (day/month/year)
02.09.2004

Priority date (day/month/year)
21.11.2003

International Patent Classification (IPC) or both national classification and IPC
H04L1/00

Applicant
MOTOROLA INC

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☒ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tx: 523656 epmu d
Fax: +49 89 2399 - 4465

Authorized Officer

Bösch, M

Telephone No. +49 89 2399-7523



**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2004/052013

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2004/052013

Box No. II Priority

1. ☒ The following document has not been furnished:

- ☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).
- ☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. ☐ It has not been possible to consider the validity of the priority claim because a copy of the priority document was not available to the ISA at the time that the search was conducted (Rule 17.1). This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.
4. Additional observations, if necessary:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2004/052013

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application,

☒ claims Nos. 17,18

because:

☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):

☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 17,18 are so unclear that no meaningful opinion could be formed (*specify*):

see separate sheet

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☐ no international search report has been established for the whole application or for said claims Nos.

☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:

the written form ☐ has not been furnished

☐ does not comply with the standard

the computer readable form ☐ has not been furnished

☐ does not comply with the standard

☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.

☐ See separate sheet for further details

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2004/052013

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-16
	No: Claims	
Inventive step (IS)	Yes: Claims	1-16
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-16
	No: Claims	

2. Citations and explanations

see separate sheet

Concerning Section I,

Basis of the report

Reference is made to the following documents, which are cited in the International Search Report:

- D1: US 2003/198312 A1 (DAS ARNAB ET AL) 23 October 2003 (2003-10-23)
- D2: US 2002/154611 A1 (KHULLAR ANDERS) 24 October 2002 (2002-10-24)
- D3: US-A-5 701 294 (WARD TORBJORN ET AL) 23 December 1997 (1997-12-23)
- D4: US-B-6 539 2051 (KOMAILI JALEH ET AL) 25 March 2003 (2003-03-25)
- D5: EP-A-1 255 368 (SIEMENS INF & COMM NETWORKS) 6 November 2002 (2002-11-06)

Concerning Section III,

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The **Claims 17 and 18** contain references to the description and drawings and hence give no clear definition of the claimed subject-matter, contrary to the requirements of Article 6 PCT.

According to Rule 6.2(a) PCT, claims must not contain such references except where absolutely necessary, which is not the case here. Therefore, the examination in section V is restricted to Claims 1-16.

Concerning Section V,

Reasoned statement with regard to novelty, inventive step or industrial applicability

1 Technical field

The present invention relates to a method for selecting a channel coding scheme for use in initiating communications with subscriber units in a cell of a communication system (**Claim 1**), a storage medium storing corresponding processor-implementable instructions (**Claim 13**) and a corresponding apparatus (**Claim 14**).

2 State of the art

Document D1 is considered to represent the closest state of the art. The described method for selecting a channel coding scheme in a data packet network like e.g. GPRS uses both the block error rate and the bit error rate for determining the channel coding scheme of the block of data to be transmitted. In case of a low block error rate, the code is selected as required by the bit error rate, otherwise the code is selected as required by the block error rate. In the latter, the carrier to interference ratio is divided into regions each being mapped to one of the available channel coding schemes, and the measured (or reported) carrier to interference ratio selects a scheme by falling into one of these regions.

When initiating a communication (TBF-flow) to a mobile station, it is checked whether information on channel quality from a previous TBF with this mobile station is available for selecting the initial coding scheme.

In detail, at the end of each TBF the coding scheme currently in use is separately stored for up- and downlink for each mobile station. When setting up a new communication to the same mobile station within T_{cache} , the cached coding scheme is applied. The cached coding scheme is aged, which means that after each T_{age} the next more robust (less efficient) coding scheme is used. This aging procedure continues until a predefined coding scheme CS_{age} is reached.

Document D2 discloses the selection of the most aggressive coding scheme and corrects this coding scheme until an acceptable link performance is reached before starting data packet transfer for a newly initiated communication. By selecting a more robust coding scheme with lower rate for transmitting in a higher number of slots responsive to successfully checking whether multi-slot operation is possible and or feasible, the risk of overheating the transmitter of the mobile station can be reduced.

D3 discloses the selection of the best channel coder based on current measurements on an idle channel and other parameters like subscribed tariff, cell load,

In D4, when setting up a new connection the bit error rate of the paging channel or broadcast channel is measured for estimating the traffic channel quality, which is used for selecting the error correction code for the traffic channel.

In D5, the initial coding scheme is set by default.

3 **The technical problem**

As no advantageous effects could be seen, the problem solved by the present invention may therefore be regarded as to provide an alternative way of determining the initial coding scheme.

4 **The invention**

According to Claims 1 and 14, this problem is solved by **selecting the cell-based coding scheme**, from a plurality of channel coding schemes, **for use in initiating communications** with subscriber units in a cell of a communication system, wherein the selection of the cell-based coding scheme is **dependent on information relating to channel coding schemes used for communications with subscriber units in the cell**.

The search report cites several "A" documents, none of which discloses or renders obvious this solution.

In particular, none of them discloses the idea underlying the claimed invention of selecting **one** coding scheme for initiating communication with subscriber units, which is dependent on information relating to coding schemes used for communications with subscriber units in the cell, in other words of defining one initial scheme by taking into consideration schemes applied by several units, thereby assuming that the consideration of schemes used by other units could lead to a more optimal initial coding scheme selection.

Hence, the claimed subject-matter of both independent claims and that of the corresponding storage medium-Claim 13 is considered to be novel, inventive and industrially applicable according to Articles 33(2), (3) and (4) PCT.

The same applies to dependent Claims 2-12, 15 and 16, which relate to further implementing details of the system or method of the independent claims and therefore equally meet these requirement of the PCT.

5 **Remark concerning clarity of the international application:**

The term "for storing a processor" used in **Claim 13** seems not to be very comprehensibly and as such renders the scope of the claim unclear in the sense of Article 6 PCT. In the preceding paragraphs, it was interpreted as follows: "A storage medium storing processor-implementable instructions arranged to carry out all the steps of a method of any of Claims 1-12".

6 Remarks concerning formal defects in the international application:

- The figures on file do not coincide with the description. For instance:
 - + the end of page 9 refers to second part of figure 2 or the left-hand side of figure 5, (figure 4 seems to be incorrect),
 - + the second paragraph of page 10 refers to figure 4 (not 5),
 - + the end of page 11 refers to the remaining part of figure 5 (not 6), and
 - + page 13 refers to figure 6 (not 7).

In this context, the Applicant is kindly requested to also correct page 11, line 15 and page 13, line 15.

- Furthermore, at present both figures 5 and 6 are designated as "second exemplary method" (see page 4, lines 6-9).
- The requirements of Rule 11.8 PCT are not met.
- In order to avoid misunderstandings by the printing section due to the line crossing all description and claim-pages, the Applicant should take the opportunity to refile these pages.
- The statement of the invention on page 3 should have been brought into conformity with the claims, in particular with Claim 13.
- In order to meet the requirements of Rule 5.1.(a),(ii) PCT, the document D1 should have been identified in the description and the relevant background art disclosed therein should have been briefly discussed.
- The features of the claims should have been provided with reference signs placed in parentheses to increase the intelligibility of the claims (see Rule 6.2 (b) PCT).

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☒ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☒ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☒ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.